In this way, the ultraviolet light sensor according to the second embodiment measures the radiation amount of the total light rays by voltammetry, while at the same measuring the radiation amount of the light with the ultraviolet light removed therefrom to determine the difference between the two radiation amounts. Thus, the amount of ultraviolet light radiated on the measuring chip can be calculated. Also, the chronoamperometry shortens the time for measuring the ultraviolet light radiated on the measuring chip.

What is claimed is:

1. An ultraviolet light measuring chip comprising:

a total light received amount detection unit; and

an ultravioletless light received amount detection unit,

wherein said total light received amount detection unit comprises a first reaction chamber for holding a first coexistent electrolyte solution containing a quinone, an organic solvent and an electrolyte and having a first light transmission window with a total light transmission plate;

wherein said ultravioletless light received amount detection unit comprises a second reaction chamber for holding a second coexistent electrolyte solution containing a quinone, an organic solvent and an electrolyte and having a second light transmission window with an ultravioletless light transmission plate;

wherein said first reaction chamber and said second reaction chamber have arranged therein a counter electrode and a reference electrode extending in both of said first reaction chamber and said second reaction chamber and immersed in the respective first and second coexistent electrolyte solutions, said first reaction chamber having arranged therein a first working electrode immersed in the first coexistent electrolyte solution thereof, said second reaction chamber having arranged therein a second working electrode immersed in the second coexistent electrolyte solution thereof and a plurality of terminals are electrically connected to each of said first working electrode, said second working electrode, said counter electrode and said reference electrode.

2. An ultraviolet light measuring chip according to claim **1**, wherein said total light transmission plate comprises quartz glass.

3. An ultraviolet light measuring chip according to claim **2**, wherein said ultravioletless light transmission plate includes an ultraviolet light cutting filter.

4. An ultraviolet light measuring chip according to claim **1**, wherein said ultravioletless light transmission plate includes an ultraviolet light cutting filter.

5. An ultraviolet light measuring chip according to claim **1**, wherein said first working electrode and said second working electrode comprise at least one material selected from the group consisting of carbon, glassy carbon and gold.

6. An ultraviolet light measuring chip according to claim **1**, wherein said counter electrode comprises a noncorrosive conductor.

7. An ultraviolet light measuring chip according to claim **6**, wherein said noncorrosive conductor of said counter electrode comprises at least selected one material selected from the group consisting of platinum, stainles steel, a platinum-containing alloy and carbon.

8. An ultraviolet light measuring chip according to claim **1**, wherein said reference electrode is configured of gold or carbon.

9. An ultraviolet light sensor comprising:

a measuring chip insertion unit that is for receiving therein an ultraviolet light measuring chip comprising a total light received amount detection unit; and an ultravioletless light received amount detection unit, wherein said total light received amount detection unit comprises a first reaction chamber for holding a first coexistent electrolyte solution containing a quinone, an organic solvent and an electrolyte and having a first light transmission window with a total light transmission plate; wherein said ultravioletless light received amount detection unit comprises a second reaction chamber for holding a second coexistent electrolyte solution containing a quinone, an organic solvent and an electrolyte and having a second light transmission window with an ultravioletless light transmission plate; and wherein said first reaction chamber and said second reaction chamber have arranged therein a counter electrode and a reference electrode extending in both of said first reaction chamber and said second reaction chamber and immersed in the respective first and second coexistent electrolyte solutions, said first reaction chamber having arranged therein a first working electrode immersed in the first coexistent electrolyte solution thereof, said second reaction chamber having arranged therein a second working electrode immersed in the second coexistent electrolyte solution thereof and a plurality of terminals are electrically connected to each of said first working electrode, said second working electrode, said counter electrode and said reference electrode, and

a connector terminal for being electrically connected to each of said terminals;

a control unit including a first power supply to apply a voltage between said first working electrode and said counter electrode and a second power supply to apply a voltage between said second working electrode and said counter electrode when said ultraviolet light measuring chip is inserted, said control unit sweeping the potential between said first working electrode and said reference electrode and sweeping the potential between said second working electrode and said reference electrode; and

an arithmetic unit including a first detection unit that detects the current flowing between said first working electrode and said counter electrode and a second detection unit that detects the current flowing between said second working electrode and said counter electrode, said arithmetic unit calculating the amount of ultraviolet light from the difference between a value of the current detected by said first detection unit and a value of the current detected by said second detection unit.

10. An ultraviolet light sensor according to claim **9**, wherein said second power supply and said first power supply are formed as a single unit with one another.

11. An ultraviolet light sensor according to claim **9**, wherein said control unit sweeps at the rate of 10 mV/s to 200 mV/s.

12. An ultraviolet light sensor comprising:

a measuring chip insertion unit that is for receiving therein an ultraviolet light measuring chip comprising a total light received amount detection unit; and an ultravioletless light received amount detection unit, wherein said total light received amount detection unit comprises a first reaction chamber for holding a first coexistent electrolyte solution containing a quinone, an organic solvent and an electrolyte and having a first light transmission window with a total light transmission plate; wherein said ultravioletless light received